

IN THE CLAIMS

The unamended claims are presented for the Examiner's convenience.

1. (Previously Presented) A pharmaceutical vaccine composition comprising an isolated stress protein complex and a physiologically acceptable carrier, wherein the stress protein complex comprises an hsp110 polypeptide and an immunogenic polypeptide.
2. (Previously Presented) The pharmaceutical composition of claim 1, wherein the hsp110 polypeptide is complexed with the immunogenic polypeptide.
3. (Previously Presented) The pharmaceutical composition of claim 2, wherein the hsp110 polypeptide is complexed with the immunogenic polypeptide by non-covalent interaction.
4. (Original) The pharmaceutical composition of claim 2, wherein the complex comprises a fusion protein.
5. (Original) The pharmaceutical composition of claim 1, wherein the complex is derived from a tumor.
6. (Original) The pharmaceutical composition of claim 1, wherein the complex is derived from a cell infected with an infectious agent.
7. (Previously Presented) The pharmaceutical composition of claim 1, wherein the stress protein complex further comprises a polypeptide selected from the group consisting of hsp70, hsp90, grp78 and grp94.
8. (Original) The pharmaceutical composition of claim 1, wherein the stress protein complex comprises hsp110 complexed with hsp70 and hsp25.
9. (Previously Presented) A pharmaceutical vaccine composition comprising an isolated polynucleotide that comprises a first polynucleotide encoding an hsp110 polypeptide and a second polynucleotide encoding an immunogenic polypeptide.

10. (Original) The pharmaceutical composition of claim 9, wherein the first polynucleotide is linked to the second polynucleotide.

11-15. (Cancelled)

16. (Previously Presented) The pharmaceutical composition of claim 1, wherein the immunogenic polypeptide comprises a cancer antigen.

17. (Original) The pharmaceutical composition of claim 16, wherein the immunogenic polypeptide comprises a her-2/neu peptide.

18. (Original) The pharmaceutical composition of claim 17, wherein the her-2/neu peptide is derived from the intracellular domain of her-2/neu.

19. (Previously Presented) The pharmaceutical composition of claim 17, wherein the her-2/neu peptide is derived from the extracellular domain of her-2/neu.

20. (Previously Presented) The pharmaceutical composition of claim 17, wherein the her-2/neu peptide is derived from the transmembrane region of her-2/neu.

21. (Previously Presented) The pharmaceutical composition of claim 16, wherein the cancer antigen is a colon cancer antigen.

22. (Previously Presented) The pharmaceutical composition of claim 1, wherein the complex has been located so as to enhance binding of the hsp110 polypeptide to the immunogenic polypeptide.

23. (Original) The pharmaceutical composition of claim 1, further comprising an adjuvant.

24-32. (Cancelled)

33. (Previously Presented) A method for inhibiting tumor growth in a subject, comprising administering to the subject an effective amount of the pharmaceutical composition of claim 16 to elicit an anti-tumor immune response in the subject, and thereby inhibiting tumor growth in the subject.

34. (Previously Presented) A method for inhibiting the development of a cancer in a subject, comprising administering to the subject an effective amount of the pharmaceutical composition of claim 16 to elicit an anti-tumor immune response in the subject, and thereby inhibiting the development of a cancer in the subject.

35-45. (Canceled)

46. (Previously Presented) The method of claim 34, wherein the hsp110 polypeptide of the pharmaceutical composition is complexed with the immunogenic polypeptide.

47. (Previously Presented) The method of claim 34, wherein the hsp110 polypeptide of the pharmaceutical composition is complexed with the immunogenic polypeptide by non-covalent interaction.

48. (Previously Presented) The method of claim 34, wherein the complex of the pharmaceutical composition comprises a fusion protein.

49. (Previously Presented) The method of claim 34, wherein the complex of the pharmaceutical composition is derived from a tumor.

50. (Previously Presented) The method of claim 34, wherein the hsp110 of the pharmaceutical composition is complexed with hsp70 and hsp25.

51. (Previously Presented) The method of claim 34, wherein the immunogenic polypeptide of the pharmaceutical composition comprises a her-2/neu peptide.

52. (Previously Presented) The method of claim 51, wherein the her-2/neu peptide is derived from the intracellular domain of her-2/neu.

53. (Previously Presented) The method of claim 51, wherein the her-2/neu peptide is derived from the extracellular domain of her-2/neu.

54. (Previously Presented) The method of claim 51, wherein the her-2/neu peptide is derived from the transmembrane region of her-2/neu.

55. (Previously Presented) The method of claim 34, wherein the cancer is colon cancer.
56. (Previously Presented) The method of claim 34, wherein the complex of the pharmaceutical composition has been heated so as to enhance binding of the hsp110 polypeptide to the immunogenic polypeptide.
57. (Previously Presented) The method of claim 34, wherein the pharmaceutical composition further comprises an adjuvant.
58. (Previously Presented) The method of claim 33, wherein the hsp110 polypeptide of the pharmaceutical composition is complexed with the immunogenic polypeptide.
59. (Previously Presented) The method of claim 33, wherein the hsp110 polypeptide of the pharmaceutical composition is complexed with the immunogenic polypeptide by non-covalent interaction.
60. (Previously Presented) The method of claim 33, wherein the complex of the pharmaceutical composition comprises a fusion protein.
61. (Previously Presented) The method of claim 33, wherein the complex of the pharmaceutical composition is derived from a tumor.
62. (Previously Presented) The method of claim 33, wherein the hsp110 of the pharmaceutical composition is complexed with hsp70 and hsp25.
63. (Previously Presented) The method of claim 33, wherein the immunogenic polypeptide of the pharmaceutical composition comprises a her-2/neu peptide.
64. (Previously Presented) The method of claim 63, wherein the her-2/neu peptide is derived from the intracellular domain of her-2/neu.
65. (Previously Presented) The method of claim 63, wherein the her-2/neu peptide is derived from the extracellular domain of her-2/neu.

66. (Previously Presented) The method of claim 63, wherein the her-2/neu peptide is derived from the transmembrane region of her-2/neu.

67. (Previously Presented) The method of claim 33, wherein the cancer antigen is a colon cancer antigen.

68. (Previously Presented) The method of claim 33, wherein the complex of the pharmaceutical composition has been heated so as to enhance binding of the hsp110 polypeptide to the immunogenic polypeptide.

69. (Previously Presented) The method of claim 33, wherein the pharmaceutical composition further comprises an adjuvant.